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United States General Accounting Office
Report to the Chairman, Subcommittee on
Office Systems, Committee on House
Administration, House of Representatives

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TELECOMMUNICATIONS PRIVACY

GSA's Planned FTS 2000 Telephone Record Controls Appear Reasonable

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GAO

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General Accounting Office
Washington, D.C. 20548

Information Management and
Technology Division

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The Honorable Charles Rose
Chairman, Subcommittee on Office Systems
Committee on House Administration
House of Representatives

Dear Mr. Chairman:

As you requested, this report provides our analysis of the General Services Administration's (GSA) plans to provide privacy for users of the proposed Federal Telecommunications System (FTS) 2000 and security of telephone records generated by the system. Specifically, in response to your concern about privacy and security issues related to the proposed system, we reviewed GSA's plans for collecting, protecting, and disseminating FTS 2000 telephone call information. In evaluating how this information will be managed and protected from abuse, we addressed the privacy and security to be provided for the collection and maintenance of telephone call-detail records, along with the applicability of the Privacy Act and the Freedom of Information Act (FOIA).

In brief, we found that GSA's plans to provide security and privacy protection over the FTS 2000 call-detail records appear reasonable. These plans are consistent with the provisions of the Privacy Act and FOIA. Nevertheless, the application of these laws to these records raises questions concerning the extent to which call-detail records should be protected and the circumstances under which the law will permit their release.

Background

FTS 2000 is the name of the planned replacement for the existing FTS network that provides long-distance services to the federal government. It is intended to provide needed improvements in the form of state-of-the-art telecommunications services and customer-agency management and control. The proposed telecommunications system will make available a comprehensive range of advanced voice, data, and related telecommunications services. The existing FTS provides only voice and limited data services to its customer agencies.

Technological advances, deregulation of the telecommunications industry, and the 1984 American Telephone and Telegraph Company divestiture have significantly changed the telecommunications environment by expanding the variety of services available from competing sources. As

a result, the Office of Management and Budget (OMB) and GSA, the central managers for federal telecommunications, have, along with the agencies themselves, had to assume greater responsibility for ensuring that the government's telecommunications are effectively managed.

In April and May 1987 OMB and GSA issued guidelines for agencies to use in establishing call-detail programs. Such programs constitute a tool for managing and controlling telecommunications resources and costs by using call-detail records.

GSA officials believe that control over the utilization of long-distance telecommunications services will be significantly improved under FTS 2000 through greater accountability, management oversight, and better data security. Upon implementation, FTS 2000 is intended to generate accurate and timely call-detail records for all long-distance calls placed through the system.[1] These long-distance call records are intended to be used for billing, monitoring call abuse, and other management purposes. In contrast, with the existing FTS, customer agencies receive call-detail data on approximately a 20-percent sample of calls, and it is usually provided at least 3 months after the period during which the calls were made.

In late January 1988 GSA issued a request for proposals (RFP) to award two FTS 2000 contracts for approximately a 60 percent/40 percent share of the anticipated business. Final bids were received from vendors on October 14, 1988, and GSA awarded the contracts to American Telephone and Telegraph Company and US Sprint on December 7, 1988.

Privacy Act and Freedom of Information Act Govern Treatment of Telephone Call Records

The Privacy Act (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) form the foundation of existing federal law applicable to the treatment of information concerning telephone calls on the existing and planned FTS systems. The Privacy Act requires that agencies institute specified control procedures to protect governmental records linked to individuals from unauthorized access and unintentional disclosure. FOIA provides the basic authority and procedures through which the public may obtain from the government records in its possession.

The inherent conflict between disclosure and protection of personal information leads to a certain tension in the application of existing law

[1]Since FTS 2000 will be an intercity network, it will not provide local communications services or call-detail records for local calls.

to call-detail records. Specifically, a record may be subject to the Privacy Act yet may also be disclosed under FOIA. Since current law does not protect call-detail records collectively, the tension between the competing values of privacy and disclosure as applied to these records must be resolved on a case-by-case basis. A record may be withheld from disclosure under FOIA only if an FOIA exemption applies to the facts of that case. Examples of FOIA exemptions that may apply in individual cases of call-detail records include (1) records that are specifically authorized under criteria established by an Executive order to be kept secret in the interest of national defense or foreign policy and are, in fact, properly classified pursuant to such Executive order and (2) the disclosure of records which would constitute a clearly unwarranted invasion of personal privacy, e.g., a government employee's use of the government system to call the individual's agency psychological counseling service.

Determining which, if any, FOIA exemptions apply may place a burden on an agency because of the nature and volume of these records. For instance, in the case of an FOIA request for the telephone call-detail records of an agency official, there may be hundreds of such calls over the course of one year. Making determinations regarding the applicability of FOIA exemptions could involve identifying all the calls to and from a particular number and reconstructing the circumstances surrounding each and every call.

OMB Guidance for Application of the Privacy Act to Data on Telephone Calls

OMB, which has oversight responsibility for the Privacy Act,[2] distinguishes between two broad classes of data concerning telephone calls: those containing information explicitly identifying individuals who may have placed or received a call, and those not containing such information. Telephone call data systems such as FTS 2000 that do not contain personal identifying information are not subject to the Privacy Act. Thus, OMB does not require that any precautions be taken pursuant to the act for protecting such data. However, data systems containing telephone call-detail records that explicitly link an individual to telephone calls are subject to the Privacy Act, and OMB requires that agencies take the precautions called for in the act to prevent inadvertent or inappropriate disclosure of such information.

[2]In addition to overseeing compliance with the Privacy Act, under the Paperwork Reduction Act of 1980, OMB is responsible for (1) developing and implementing policies and guidelines on information disclosure and confidentiality, and the security of information maintained by federal agencies; and (2) providing agencies with advice and guidance about information security, restriction, exchange, and disclosure.

On April 20, 1987, OMB issued guidance explaining the ways in which the act affects telephone call records, which are generated from call-detail reports.[3] For the purposes of this guidance, OMB has defined a call-detail report as being the initial system-generated report of telephone calls either made to or initiated from the FTS system. The report may contain information such as the calling number; the called number; the time, date, and duration of the call; the city and state of the number called; and the commercial cost. But, since the call-detail report contains no information identifying the individual making or receiving calls, it is not considered a Privacy Act record.

However, as OMB's guidance states, when call-detail information is systematically linked (as in an agency cost- or abuse-control program) to individuals who may have placed or received calls, that system of records is subject to the Privacy Act. When records come under the Privacy Act, agencies that create or maintain such records must follow certain procedures to protect these records from unauthorized disclosure. The procedures required by the act include

- identifying each system of records containing information on individuals and publishing in the Federal Register a public notice of the existence and character of those systems, including the routine uses to be made of the records;
- establishing reasonable administrative, technical, and physical safeguards to assure that records are disclosed only to those who are authorized to have access;
- obtaining, with some major exceptions, the written consent of the individual about whom a record is maintained before disclosing personal information from a Privacy Act system of records. (Exceptions to this procedure include disclosure to agency officials with a "need to know" to perform their duties, disclosure for routine uses compatible with the purposes for collecting the information, disclosure to inspectors general upon authorized requests, and where disclosure of the record is required under FOIA.); and
- maintaining an accounting of all disclosures of information from such systems of records, except for agency employees who have a need for the record to perform their duties or for responses to requests made under FOIA.

OMB's guidance directs agencies, when disclosing information, not to release telephone call-detail information on their own initiative without

[3]Federal Register, vol. 52, April 20, 1987, pp. 12990-12993.

an FOIA request. The guidance, however, does permit an agency to release certain "public domain" information—such as agency telephone directories—on its own initiative, even without an FOIA request.

FOIA requests by third parties to GSA for call-detail data are and will continue to be referred to the host agency, according to GSA officials. For the most part, GSA plans to continue its current practice of releasing these records only upon the approval of the host agency. Exceptions to this practice include requests from us, from agency inspectors general, or from U.S. attorneys. However, GSA has informed us that since the records belong to GSA, there may be other circumstances under which it may still decide to release the records without consulting with the host agency.

GSA Plans Controls Over Information on Individual Long-Distance Calls

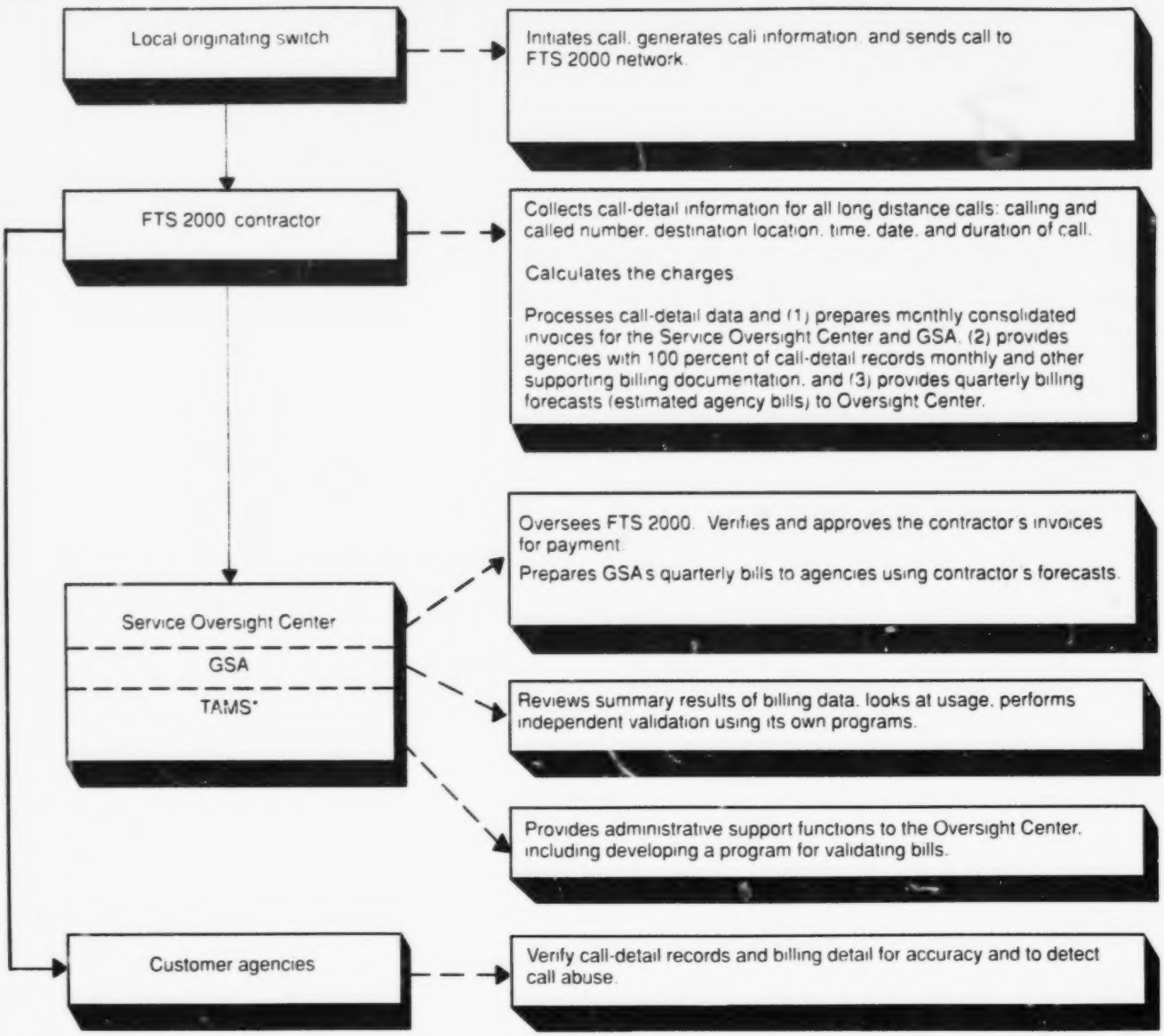
FTS 2000, as planned, is expected to help customer agencies better manage and control the use and cost of their long-distance telecommunications services, including verification of their billing detail. Agencies may use the call-detail information to detect unauthorized use of long-distance services, such as personal calls. In performing this function, agencies may seek to associate individuals with the telephone numbers contained in the call-detail information.

The implementation of the FTS 2000 system will make available a greater amount of information in the system's call-detail records for long-distance telephone calls. Different groups, including the FTS 2000 contractor and customer agencies, will have contact with or access to this information on individual long-distance calls. Although the Privacy Act does not require safeguarding from inappropriate release information that does not identify individuals, GSA plans to limit the number of people handling these data and restrict access to the computer systems that generate and maintain the data. These planned safeguarding practices are expected to provide adequate protection over the call-detail information. These plans notwithstanding, GSA has established a Federal Telecommunications Privacy Advisory Committee to consider whether GSA should issue rules dealing with the privacy aspects of federal call-detail records. Further, GSA has contracted with MITRE Corporation to look into privacy issues related to the system's records and prepare a special report on the privacy and security arrangements associated with the preparation and processing of FTS 2000 call-detail records.

Details of Long-Distance Calls Will Be Used to Manage FTS 2000

Various forms of detailed information concerning the placement of calls through FTS 2000, such as call-detail records and billing data, will be routinely available to the contractors, GSA, and customer agencies in the course of managing and administering the system. GSA has set forth in its RFP the relationships that exist among GSA, its service oversight center, the technical assistance and management services contractor, the FTS 2000 contractor, and customer agencies in handling this information. Figure 1 illustrates the main elements of these relationships.

Figure 1: Flow Chart for FTS 2000 Call-Detail Information


Local originating switch
Initiates call, generates call information, and sends call to FTS 2000 network.
FTS 2000 contractor
Collects call-detail information for all long distance calls: calling and called number, destination location, time, date, and duration of call.
Calculates the charges
Processes call-detail data and (1) prepares monthly consolidated invoices for the Service Oversight Center and GSA, (2) provides agencies with 100 percent of call-detail records monthly and other supporting billing documentation, and (3) provides quarterly billing forecasts (estimated agency bills) to Oversight Center.
Service Oversight Center
GSA
TAMS*
Oversees FTS 2000. Verifies and approves the contractor's invoices for payment.
Prepares GSA's quarterly bills to agencies using contractor's forecasts.
Reviews summary results of billing data, looks at usage, performs independent validation using its own programs.
Provides administrative support functions to the Oversight Center, including developing a program for validating bills.
Customer agencies
Verify call-detail records and billing detail for accuracy and to detect call abuse.

* Technical Assistance and Management Services contractor

Creation of an information record concerning the placement of a long-distance call over FTS 2000 will begin at the time the call is initiated. At the point that the local switch passes the call to FTS 2000, the system will record the call-detail data. According to GSA officials, the record containing this information will not contain any explicit identification of either the calling or called party. GSA does not intend to develop a cross-reference directory or otherwise match users' names with the telephone numbers contained in the data base.

The FTS 2000 contractor is required to provide a service oversight center facility and related resources needed by GSA to oversee the contractor's operations. Center personnel will verify and approve bills for payment, audit the billing system, and resolve billing problems, among other duties.

GSA awarded a technical assistance and management services contract to obtain advice and assistance in its oversight and management of the FTS 2000 service contract. This technical assistance contractor will develop practices and procedures for the service oversight center, including a billing verification system that will be used by the center to check the billing information received from the system contractor.

The FTS 2000 contractor will maintain and manage a data base of these call-detail records. While the data will be generated and maintained by the contractor, the government will have unlimited rights to access the data. This call-detail data base will be used by the contractor to bill GSA for services provided under the contract. Consolidated invoices will be sent monthly to GSA's Office of Finance and the service oversight center for verification and validation of the bills for payment. The FTS 2000 contractor will not be required to routinely submit call-detail data with these invoices. Such data will be obtained by the oversight center only to resolve billing disputes.

The contractor will also provide agencies with their call-detail records and detailed support for the monthly charges, plus any other data an agency requests. These records will be distributed to the agencies via magnetic tape and/or hard copy, as requested. The contractor must retain all historical data pertaining to the accounting and billing of FTS 2000 services for 2 years.

GSA Plans to Restrict Accessibility to and Provide Security for Call-Detail Records

GSA intends to provide protection for call-detail records, the automated systems that produce the records, and the facilities of its service oversight center. In our view, GSA's plans for protecting against unauthorized or unintentional access indicate that call-detail records will be provided adequate security.

The government has access rights to the call-detail data in order to properly oversee and administer FTS 2000 services. Access to the data will be made available to GSA through its service oversight center. GSA plans to limit access to a select number of authorized center staff. GSA also plans to require the FTS 2000 contractor to limit the number of contractor personnel to only those who will need to have access to the system's data base. Similarly, according to a GSA official, access to the existing FTS call-detail data base is currently limited to three or four people in only one branch within GSA.

The FTS 2000 contractor is required to provide all the procedures, documentation, tools, and methodology necessary to grant the service oversight center timely access. The details for providing this access are not described in the RFP, but will be developed by the technical assistance and management services contractor as it develops the oversight center's procedures.

Agencies will have, if requested, direct, on-line access to their own call-detail data in the FTS 2000 data base, or they may request that it be obtained. In either case, agencies will be able to access their own data only.

To help ensure that the FTS 2000 contractor controls access to information and provides other security measures to ensure the integrity of the call-detail record data base, GSA plans to conduct periodic audits of security compliance. Procedures are to be developed for GSA under the technical assistance contract.

The FTS 2000 contractor will also be specifically required to protect those FTS 2000 data bases and information processing systems that are critical to the reliable operation of the network. GSA has identified the call-detail record data base as being in this category. To provide the required protection, the system contractor must meet security level class C2 of the Department of Defense Trusted Computer System Evaluation Criteria (DOD 5200.28-STD) or its equivalent in implementing access-control features for its computer systems. The C2 level features provide protection of information in a multi-user environment. The criteria

require the contractor to use C2-rated commercial products, or equivalent, from the evaluated products list.

Systems in this class enforce various features to control access to the system through log-in procedures. For example, an identification and authentication requirement specifies that the system must be able to identify and then verify that individual users are allowed access to particular information maintained in the system. If the FTS 2000 contractor is unable to use C2-rated products, the contractor is to provide a description of how access to these sensitive systems will be restricted to small populations of authorized users, and how the systems will be protected against unauthorized access.

The service oversight center must meet the security requirements of the RFP. A guard service or automated card-entry system is required to provide the physical security for access to this facility. In addition, special storage accommodations are to be provided for documents and tapes that require a security clearance for access.

GSA Could Implement Additional Procedures at the Request of Individual Agencies

GSA has indicated that, should an agency desire additional controls to meet the privacy needs of individuals using the government telecommunications system and decide to forego part of its obligation to determine individual accountability for its long-distance telephone services, it has the capability to remove certain data from the call-detail data base.

According to GSA officials, they could institute a procedure for selectively stripping data identifying called numbers from the call-detail data base. Specifically, should a customer agency request it and be willing to reimburse GSA for the expenses associated with its implementation, GSA could set up a search procedure to locate calls from a certain telephone number and strip the last four digits of the called number. The system switches would still record the entire called number and the information would still be included in the data written to a tape to update the call-detail data base, usually overnight. The next day, however, when those tapes are delivered to the computer center, the last four digits of all those numbers called from the specified calling numbers would be stripped before the information is added to the call-detail data base. Once stripped, the numbers cannot be reconstructed.

Under this procedure, it would be possible to identify only the exchange called from selected telephones and not the specific telephone number within that exchange. This would offer a limited degree of additional

protection to the privacy of the caller, but would also hamper, to some degree, an agency's ability to control costs, verify calls for which it is charged, or investigate abuse. An agency may view the stripping of selected numbers as a necessary step to protect the privacy of individual users and ensure the fulfillment of the agency's mission. However, the stripping of such records is difficult to reconcile with existing requirements that disbursements be supported by basic payment documents showing sufficient detail to adequately account for the disbursement, enable audit of the transaction, and settle accounts of certifying and disbursing officers.

Conclusions

GSA's plans for handling information on individual long-distance telephone calls under FTS 2000 are reasonable for providing protection from unauthorized access and unintentional disclosure. Further, its plans are consistent with FTS procedures now in place and with specific OMB and GSA guidelines. GSA's plans are likewise consistent with the safeguarding practices called for in the Privacy Act, even though the act alone places no legally enforceable obligation upon GSA to protect FTS 2000 call-detail records from disclosure in the form in which they are to be collected and retained, i.e., without explicit personal identifiers. GSA's capability, upon an agency's request, to strip the last four digits from the records of all calls placed from specific numbers would provide some additional protection, but may not meet the accountability requirements for supporting payments.

Implementation of FTS 2000 will likely heighten the existing tension between record disclosure and privacy protection. The new system will create a call-detail record data base for all calls placed through the system consisting of calling number; number called; time, date, and duration of call; and location of number called. Today, only a 20-percent sample of call-detail records exists; even this small sample does not include call location or commercial cost for all agencies.

The existence—for the first time—of call-detail information covering 100 percent of calls placed through the system will provide useful information to assist agencies in controlling costs through verification of billing-detail data and monitoring system abuse, such as unauthorized personal calls. At the same time, however, it may well prompt an increase in FOIA requests, since the data base will contain more complete, timely, accurate, and therefore more valuable information. Privacy concerns may correspondingly increase, since available telephone directories can be used to link individuals to telephone call-detail records.

While the tension between privacy concerns and public disclosure as applied to telephone records will still have to be resolved on a case-by-case basis, the potential rise in FOIA requests may well exacerbate such tensions. It would seem prudent, therefore, to reexamine the government's policy on the release of call-detail records and prepare policy guidelines covering this newly-created situation before system operation begins.

Recommendations

In order to establish the basis for a policy on the releasability of call-detail data appropriate to the circumstances of FTS 2000, we recommend that the Director, Office of Management and Budget, as part of the responsibilities under the Privacy Act and the Paperwork Reduction Act, review the extent to which telephone call-detail records should be protected from disclosure and the circumstances under which they should be released. We recommend further that the Director, with the assistance of the General Services Administration and the Department of Justice, explore various alternatives and, if appropriate, propose legislation and/or issue clarifying guidance for the treatment of such records.

Objectives, Scope, and Methodology

As agreed during an August 27, 1987, meeting with your office, the objective of our review was to examine GSA's plans for collecting, protecting, and disseminating information concerning individual long-distance telephone calls handled by FTS 2000 in the context of concern for individual privacy. Our review was based on GSA's plans as represented by the FTS 2000 RFP through Amendment 8, issued January 28, 1988.

In conducting our review, we (1) determined the applicability of the Privacy Act and FOIA in protecting, restricting access to, or releasing telephone call-detail records; (2) analyzed the roles and organizational structure involved in these plans for the administration of FTS 2000 records; and (3) examined GSA's planned steps to provide security for the collection and maintenance of telephone call-detail records.

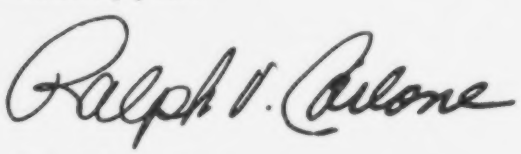
To assess standards and guidelines, we reviewed GSA's Federal Information Resources Management Regulation Bulletin 50 on the management and control of long-distance telephone services, as well as OMB's April 1987 guidance on Privacy Act implications of call-detail programs. We also met with OMB staff in Washington, D.C., to discuss their work in the area of security and privacy of call-detail records, and with a Department of Justice attorney responsible for FOIA.

Our review was conducted in Washington, D.C., at GSA's Information Resources Management Service. We interviewed GSA FTS 2000 policy-level and program-level officials and discussed with GSA's technical and billing staffs current FTS billing procedures and proposed procedures under FTS 2000.

We reviewed a report previously prepared for the Subcommittee by the Clerk of the House of Representatives on security and privacy issues, using it as a means to determine how these issues had been addressed, and gathered additional information on the Clerk's investigation of these issues. We also met with staff of the Committee on House Administration to obtain information on the long-distance telephone service provided to House Members in Washington, D.C., and to the Members' district offices. Our review was conducted from September 1987 through January 1988. Since our audit work was completed, information has been updated, where necessary, through December 1988. Our work was performed in accordance with generally accepted government auditing standards. The views of responsible OMB, GSA, and Department of Justice officials were sought during the course of our work and their comments have been incorporated where appropriate.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies to interested parties and make copies available to others upon request. This report was prepared under the direction of Jack L. Brock, Jr., Associate Director. Other major contributors are listed in the appendix.

Sincerely yours,



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Assistant Comptroller General

Appendix

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